

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P752PC00	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/DK2004/000492	International filing date (day/month/year) 08/07/2004	(Earliest) Priority Date (day/month/year) 08/07/2003
Applicant GENESTO A/S		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☒ none of the figures is to be published with the abstract.

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
- a. type of material
- ☒ a sequence listing
- ☐ table(s) related to the sequence listing
- b. format of material
- ☒ in written format
- ☒ in computer readable form
- c. time of filing/furnishing
- ☐ contained in the international application as filed
- ☐ filed together with the international application in computer readable form
- ☒ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K16/12 C07K16/46 C12N15/13 C12N15/62 C12N5/10
 G01N33/569 G01N33/577 A61K39/395 A61K39/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, CHEM ABS Data, WPI Data, PAJ, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	J. SAMPSON ET AL.: "Immunologic characterization of a monoclonal antibody to Streptococcus pneumoniae pneumococcal surface adhesin A (PsaA) protein." ABSTRACTS OF THE GENERAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, vol. 99, 1999, page 273, XP008027694 USA * abstract E-8 *	1-5, 8, 9, 12-19, 21-24, 39-42
Y	----- -/--	6, 7, 25-31

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

30 November 2004

Date of mailing of the international search report

06/12/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	H. RUSSELL ET AL.: "Monoclonal antibody recognizing a species-specific protein from Streptococcus pneumoniae." JOURNAL OF CLINICAL MICROBIOLOGY, vol. 28, no. 10, October 1990 (1990-10), pages 2191-2195, XP002109328 Washington, DC, USA abstract	1-5, 12-19, 21-24, 36-38
X	N. SRIVASTAVA ET AL.: "Selection of an immunogenic and protective epitope of the PsaA protein of Streptococcus pneumoniae using a phage display library." HYBRIDOMA, vol. 19, no. 1, February 2000 (2000-02), pages 23-31, XP001064205 New York, NY, USA abstract	1-5, 10-19, 21-24, 36-42
X	T. PILISHVILI ET AL.: "Neutralization of attachment of Streptococcus pneumoniae to human epithelial cells by recombinant PsaA and anti-PsaA antibodies." ABSTRACTS OF THE GENERAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, vol. 101, 2001, page 346, XP008027692 USA * abstract E-80 *	1-5, 12-16, 18,19, 21-23, 28,29,40
Y	W. VAN DER POL ET AL.: "Pneumococcal capsular polysaccharide-specific IgA triggers efficient neutrophil effector functions via FcαRI (CD89)." JOURNAL OF INFECTIOUS DISEASES, vol. 182, no. 4, October 2000 (2000-10), pages 1139-1145, XP008027685 Chicago, IL, USA abstract page 1140, left-hand column, line 3 - line 17 figure 4	6,7, 25-31
X	WO 02/092017 A (L. PIROFSKY ET AL.) 21 November 2002 (2002-11-21) page 21 - page 22 claims	8,9, 12-16, 18,19, 21-24
A	WO 02/079254 A (E. JANOFF & C. FASCHING) 10 October 2002 (2002-10-10) claims	8,39,41, 42
9 3	A US 5 686 070 A (DOERSCHUK ET AL.) 11 November 1997 (1997-11-11) examples	1-4,18, 39,41,42

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 37 (partially, for reasons of industrial applicability)
because they relate to subject matter not required to be searched by this Authority, namely:
Although claim 37 is directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 02092017	A	21-11-2002	CA	2447114 A1		21-11-2002
			EP	1463522 A1		06-10-2004
			WO	02092017 A2		21-11-2002

WO 02079254	A	10-10-2002	WO	02079254 A1		10-10-2002
			US	2004198960 A1		07-10-2004

US 5686070	A	11-11-1997	CA	2181787 A1		08-09-1995
			EP	0749488 A1		27-12-1996
			JP	9509837 T		07-10-1997
			WO	9523865 A1		08-09-1995
			US	5707622 A		13-01-1998
			US	5702946 A		30-12-1997
			US	5677426 A		14-10-1997
			US	5874080 A		23-02-1999
